## Amendments to the Specification

Please replace the paragraph extending from page 7, line 16-26, with the following amended paragraph:

As mentioned above, in the embodiment of FIGS. 3A-4, the polarization field has a magnitude ($\xi_p$) that is sufficient to align conduction band states near $E_F$ at first heterointerface 18 with valence band states near $E_F$ at second heterointerface 20. That is, $\xi_p$ has a value that is on the order of $(E_{c,1}-E_{v,2})/(q \cdot D)$, where $E_{c,1}$ is a relative conduction band energy at first heterointerface 18, $E_{v,2}$ is a relative valence band energy at second heterointerface 20, q is a unit carrier charge, and D is the thickness of the intermediate semiconductor layer 16. In particular, in this embodiment, $\xi_p$ has a value that is greater than $(E_{c,1}-E_{v,2})/(q \cdot D) - \xi_d$, where $\xi_d$ is the value of the dopant-induced drift field through the intermediate semiconductor layer as shown in FIG. 3A. Consequently, although the intermediate semiconductor layer thickness (D) should be thin enough to enable charge carriers to tunnel therethrough, it should not be thinner than $(E_{c,1}-E_{v,2})/(q \cdot (\xi_p + \xi_d))$.